

# Babbling Books

## Assembly Instructions

### Materials per Unit:

- 1 12"x48" Sheet Perforated Steel (we used 16 gauge w/ 1/8" holes staggered at 3/16")
- 1 14"x 24" Sheet of 1/4" Acrylic
- 2 1" Utility Hinges w/ Appropriately Sized Holes and Hardware
- 4 1/2"x 3/4" Corner Braces w/ Appropriately Sized Holes and Hardware
- 12 1/2" #4 Machine Screws and Nuts
- 2 5"x2" (or similar) Metal Tie Plates with 1/8" holes
- 3 24" Heavy-Duty Cable Ties (Big Zip Ties)
- 10' Vinyl Tubing
- Thin Gauge Wire
- Plastic Spray Primer and Neon Spray Paint

### Assembly:

1. We began by drawing out our speech bubble shape in AutoCAD to get the measured lengths and angles we would need. (Fig 1) Mark out these dimensions with strips of tape on the sheet metal, starting at corner (1.) and indicating which direction the metal should be bent at each point. Once all the segments are marked, there will be about an inch of material remaining; this will allow the metal to overlap itself and be fastened together. Using a metal brake, carefully bend the metal at each corner indicated; use a protractor if necessary to verify angle measurements. Once the shape is complete, match up the perforation of the overlapping material and use four of the screws and nuts to hold the shape together.
2. Cut the two pieces of acrylic to fit just within the opening of each side; it should not be too tight, as this is going to act as the door to the little library. (While this can be done by hand, we strongly recommend using a laser cutter if possible.) Cut (or drill) small holes near the top of the front panel to accommodate the screws for the two hinges. On the back panel, make holes to allow for a corner brace on the top, bottom, left and right edges. Using the appropriately sized screws and nuts, fasten the acrylic pieces to the metal box with the braces and hinges; they should be inset at least 3/4" from the edge of the metal on each side.

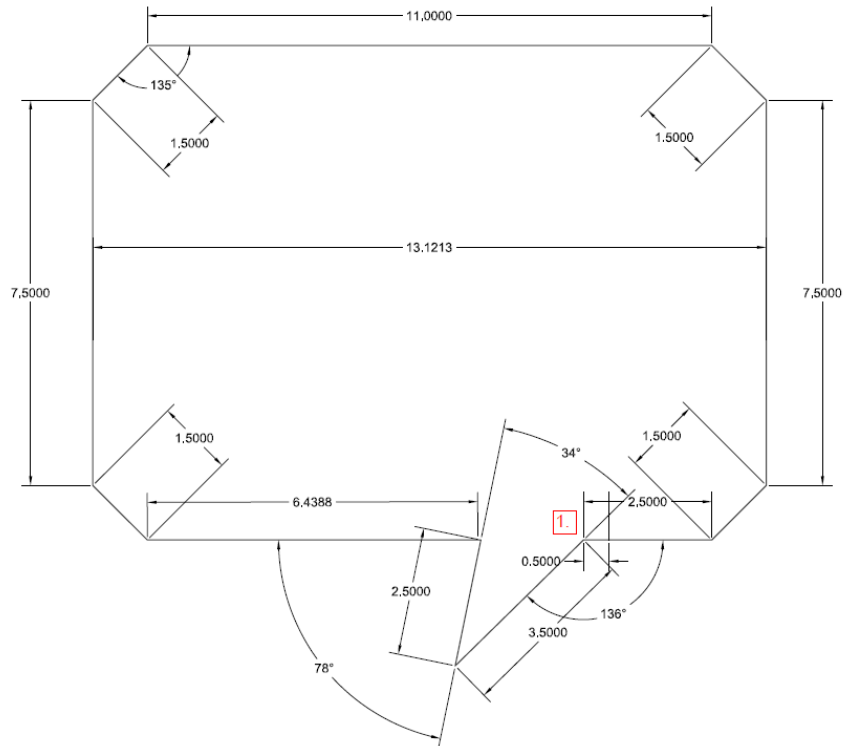


Figure 1

3. To cover the sharp metal edge of the library, cut a 5' length of vinyl tubing for both sides. Split the tubing down one side with a utility knife, being careful to make as straight a cut as possible. Paint the tubing using a plastics primer and the color neon spray paint desired. Paint should dry over night before being handled. Fit the cut edge of the tubing over the metal edge on each side. Use the thin gauge wire where needed to secure the tubing to the perforated frame.
4. Using the two metal plates, align them with the perforations to get as many points of contact as possible. Thread the screws through the holes of the plates and metal, and loosely screw the nut on the end. Slip each of the cable ties between the plates and the frame of the library, and then tighten up the nuts to secure them.
5. Your Little Free Library is ready! Using the cable ties, fasten the structure tightly to any tree, light post, or similar object, and load it up with books.